

13

7. The method according to claim 5, further comprising injecting a filling material into a site of the implant introduction.

8. An expansible implant for bone restoration comprising:
a single plane of expansion;

at least one plate forming a bearing surface for bone,
wherein upon expansion of the implant by application of
a longitudinal force to the implant, the plate is directed
away from a longitudinal axis of the implant according
to the single plane of expansion at the time of the expansion of the implant;

a first end;

a second end;

at least one support for at least one plate; and

a first zone of material provided between a first end of the
at least one support and the at least one plate, wherein the
first zone plastically deforms during expansion of the
implant for controlling the expansion of the implant.

9. The expansible implant according to claim 8, wherein the controlled expansion substantially preserves the implant at any determined expansion value between an initial minimum thickness of the implant before any expansion and a maximum thickness of the implant after maximum expansion.

10. The expansible implant according to claim 8, wherein the first zone of material includes a thickness that is less than the thickness of the at least one support.

11. The implant according to claim 8, further comprising a second zone of material that plastically deforms during expansion of the implant, wherein the second zone of material is provided between a second end of the at least one support and the first end of the implant.

12. The implant according to claim 11, wherein the second zone of material includes a thickness that is less than the thickness of the at least one support.

13. The implant according to claim 8, wherein the at least one plate comprises two opposed plates respectively forming first and second bearing surfaces for the bone upon expansion of the implant, each plate being directed away from a longitudinal axis of the implant according to the single plane of expansion.

14. A method for treating bone comprising:

introducing, into a bone, an expansible implant having:

a single plane of expansion;

at least one plate forming a bearing surface for bone,
wherein upon expansion of the implant by application

14

of a longitudinal force to the implant, the at least one plate is directed away from a longitudinal axis of the implant according to the single plane of expansion at the time of the expansion of the implant;

a first end;

a second end;

at least one support for at least one plate; and

a first zone of material provided between a first end of the at least one support and the at least one plate, wherein the first zone plastically deforms during expansion of the implant for controlling the expansion of the implant;

positioning the expansible implant in the bone in order to correspond the single plane of expansion with a bone restoration plane; and

expanding the implant in the bone restoration plane by applying a longitudinal force to the implant.

15. The method according to claim 14, wherein the controlled expansion substantially preserves the implant at any determined expansion value between an initial minimum thickness of the implant before any expansion and a maximum thickness of the implant after maximum expansion.

16. The method for treating bone according to claim 14, further comprising injecting a filling material into a site of the implant introduction.

17. An expansible implant comprising:

at least one plate forming a bearing surface, wherein upon expansion of the implant by application of a longitudinal force to the implant, the plate is directed away from a longitudinal axis of the implant;

a first end;

a second end;

at least one support for the at least one plate; and

a zone of material provided between the at least one support and the at least one plate, wherein the zone plastically deforms during expansion of the implant for controlling the expansion of the implant.

18. An expansible implant according to claim 17, wherein the controlled expansion substantially preserves the implant at any determined expansion value between an initial minimum thickness of the implant before any expansion and a maximum thickness of the implant after maximum expansion.

* * * * *